

CLAIMS

1. An antimicrobial peptide including the amino acid sequence represented as the following sequence equation (I):

5 N-terminus - $X^1X^2X^3X^4X^5X^6X^7X^8X^9X^{10}X^{11}X^{12}X^{13}X^{14}X^{15}$ - C-terminus - (I)

wherein,

X^1 is absent or a basic amino acid;

X^2 are two identical or different hydrophobic amino acids;

X^3 is a basic amino acid;

10 X^4 is glutamine or asparagine;

X^5 is phenylalanine or tryptophane;

X^6 is proline;

X^7 is isoleucine or valine;

X^8 is glycine;

15 X^9 is a basic amino acid;

X^{10} are two identical or different hydrophobic amino acids;

X^{11} are two identical or different basic amino acids;

X^{12} are two identical or different hydrophobic amino acids;

X^{13} are two identical or different basic amino acids;

20 X^{14} are two identical or different hydrophobic amino acids;

X^{15} is absent or a basic amino acid.

2. The antimicrobial peptide according to claim 1 including one of the amino acid sequences selected from SEQ ID NO: 1 to 34.

3. An antimicrobial peptide including the amino acid sequence represented as the following sequence equation (II):

N-terminus - $X^{15}X^{14}X^{13}X^{12}X^{11}X^{10}X^9X^4X^5X^6X^7X^8X^3X^2X^1$ -C-terminus - (II)

wherein,

- 5 X^1 is absent or a basic amino acid;
- X^2 are two identical or different hydrophobic amino acids;
- X^3 is a basic amino acid;
- X^4 is glutamine or asparagine;
- X^5 is phenylalanine or tryptophane;
- 10 X^6 is proline;
- X^7 is isoleucine or valine;
- X^8 is glycine;
- X^9 is a basic amino acid;
- X^{10} are two identical or different hydrophobic amino acids;
- 15 X^{11} are two identical or different basic amino acids;
- X^{12} are two identical or different hydrophobic amino acids;
- X^{13} are two identical or different basic amino acids;
- X^{14} are two identical or different hydrophobic amino acids;
- X^{15} is absent or a basic amino acid.

20

4. The antimicrobial peptide according to claim 3 including one of the amino acid sequences selected from SEQ ID NO: 33 to 68.

5. The antimicrobial peptide according to claim 1, wherein the C-

terminus of the amino acid sequence is amidated.

6. The antimicrobial peptide according to claim 2, wherein the C-terminus of the amino acid sequence is amidated.

5

7. The antimicrobial peptide according to claim 3, wherein the C-terminus of the amino acid sequence is amidated.

8. The antimicrobial peptide according to claim 4, wherein the C-terminus of the amino acid sequence is amidated.

10

9. An antimicrobial peptide including one of the amino acid sequences selected from SEQ ID NO: 69 to 72.

15

10. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 1 as effective ingredients in a pharmacologically effective amount.

20

11. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 2 as effective ingredients in a pharmacologically effective amount.

12. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 3 as effective ingredients in a pharmacologically

effective amount.

13. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 4 as effective ingredients in a pharmacologically
5 effective amount.

14. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 5 as effective ingredients in a pharmacologically effective amount..

10

15. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 6 as effective ingredients in a pharmacologically effective amount.

15 16. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 7 as effective ingredients in a pharmacologically effective amount.

17. An antimicrobial composition comprising one or more antimicrobial
20 peptides according to claim 8 as effective ingredients in a pharmacologically effective amount.

18. An antimicrobial composition comprising one or more antimicrobial peptides according to claim 9 as effective ingredients in a pharmacologically

effective amount.